

Pragasto Aji Hendro Puadi, 2020, **Ruang Barisan Morrey dan Sifat Elementernya.** Skripsi ini dibawah bimbingan Dr. Eridani, M.Si. dan Abdulloh Jaelani, S.Si., M.Si., Departemen Matematika, Fakultas Sains dan Teknologi, Universitas Airlangga, Surabaya.

ABSTRAK

Ruang Morrey menjadi ruang yang penting dan seringkali dibahas dalam banyak cabang matematika. Pada skripsi ini dibahas sifat elementer ruang barisan Morrey ℓ_q^p dan ruang barisan Morrey tipe lemah $\omega\ell_q^p$ serta hubungannya yang erat dengan ruang barisan ℓ^p . Berdasarkan hasil pembahasan diperoleh sifat elementer ruang barisan Morrey ℓ_q^p adalah $\ell^p \subset \ell_q^p$ dengan $1 \leq p \leq q < \infty$ dan $\ell_q^{p_2} \subseteq \ell_q^{p_1}$ dengan $1 \leq p_1 \leq p_2 \leq q < \infty$. Sifat elementer ruang barisan Morrey tipe lemah yaitu $\ell_q^p \subseteq \omega\ell_q^p$ dengan $1 \leq p \leq q < \infty$, $\omega\ell_q^{p_2} \subseteq \omega\ell_q^{p_1}$ dengan $1 \leq p_1 \leq p_2 \leq q < \infty$ dan ruang barisan Morrey tipe lemah $\omega\ell_q^p$ adalah ruang quasinorm. Selain itu, hubungan antara ruang barisan Morrey ℓ_q^p , ruang barisan Morrey tipe lemah $\omega\ell_q^p$ dan ruang barisan ℓ^p adalah $\ell^p \subset \ell_q^p \subseteq \omega\ell_q^p$.

Kata kunci: *Ruang Barisan, Ruang Morrey, Ruang Barisan Morrey Tipe Lemah, Sifat Elementer*

Pragasto Aji Hendaro Puadi, 2020, **Discrete Morrey Space and Their Elementary Properties.** This undergraduate thesis is supervised by Dr. Eridani, M.Si. and Abdulloh Jaelani, S.Si, M.Si., Mathematics Department, Faculty of Science and Technology, Airlangga University, Surabaya.

ABSTRACT

Morrey spaces is often discussed and became an important spaces in many branches of mathematics. This thesis discussed the elementary properties of Morrey sequence spaces ℓ_q^p and weak type Morrey sequence space $\omega\ell_q^p$ and also its relation with ℓ^p sequence spaces. Based on the results of the discussion, it was obtained that the elementary properties of Morrey sequence spaces ℓ_q^p is $\ell^p \subset \ell_q^p$ with $1 \leq p \leq q < \infty$ and $\ell_q^{p_2} \subseteq \ell_q^{p_1}$ with $1 \leq p_1 \leq p_2 \leq q < \infty$. The elementary properties of weak type Morrey sequence spaces $\omega\ell_q^p$ is $\ell_q^p \subseteq \omega\ell_q^p$ with $1 \leq p \leq q < \infty$, $\omega\ell_q^{p_2} \subseteq \omega\ell_q^{p_1}$ with $1 \leq p_1 \leq p_2 \leq q < \infty$ and weak type Morrey sequence spaces $\omega\ell_q^p$ is quasinormed space. Also, the relation of Morrey sequence spaces ℓ_q^p , weak type Morrey sequence spaces $\omega\ell_q^p$ and ℓ^p sequence spaces is $\ell^p \subset \ell_q^p \subseteq \omega\ell_q^p$.

Keywords: *Sequence Spaces, Morrey Spaces, Weak Type Morrey Sequence Spaces, Elementary Properties.*